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AUTHOR Hunt, Elizabeth; Browning, Philip
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ABSTRACT

A study was conducted on the interactional relationship between independent and dependent mildly retarded adolescents (N=24) and their mothers. Adolescent-mother pairs separately engaged in a videotaped problem solving task for 20 minutes. The 24 videotapes were then subjected to an interactional coding system comprised of five behavioral domains. Differential behavioral patterns based on the five domains resulted between independent and dependent adolescents, their respective mothers, and the interaction between the adolescents and their respective mothers. These differences were reflected in the rate of occurrence rather than types of behavior since all Ss were assessed on the same domain variables. Among findings were that independent adolescents participated more actively in the problem solving task, independent adolescents were put in the position of being more passive while their mothers "took over" the problem solving activity, and dependent adolescents' rate of verbal behavior was less than their mothers. (Author/SB)

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Authors
Elizabeth Hunt
Philip Browning

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INDEPENDENCE AND DEPENDENCE IN MILDLY RETARDED ADOLESCENTS: A MOTHER-ADOLESCENT INTERACTION ANALYSIS[1]

The psychological behavior of independence and dependence in children/adolescents has received a fair amount of research attention over the past decade. These research efforts, for the most part, can be grouped into the following three themes: (1) Demographic characteristics of independent and dependent children/adolescents (e.g., Andrews & Brown, 1974; Cornoldi & Fattori, 1976; Hollinger, 1976; Kinsolving & Bone, 1971; Mcdonagh, 1971); (2) Parental influences on the development of independence and dependence in children/adolescents (e.g., Baumrind, 1973; Donoghue, 1975; Loeb, 1975; Stewart, 1967; Taylor, 1976); and (3) Influences of independent and dependent children/adolescent behavior on parental responses (e.g., Belsky, 1973; Marcus, 1976; Osofsky & O'Connell, 1972; Osofsky & Oldfield, 1971).

It is altogether surprising that none of the above studies or other research endeavors have addressed the issue of independent/dependent behavior in mentally retarded children or adolescents. This is especially startling since a large number of retarded persons remain overly dependent on their families throughout their lives (Stanfield, 1973). An increased understanding of the psychological nature of independent and dependent behavior of retarded persons is critical in light of the fact that an ultimate goal for these persons is "independent living". The purpose of this study was to investigate the interactional relationship between independent and dependent mildly retarded adolescents and their mothers. Specifically, the three research questions were: (1) Does a set of identified behavioral variables differentiate between independent and

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dependent mildly retarded adolescents?; (2) Does a set of identified behavioral variables differentiate between the mothers of independent and the mothers of dependent mildly retarded adolescents?; and (3) Does a set of identified behavioral variables differentiate between the mother-adolescent interaction patterns in independent and in dependent mildly retarded adolescents?

Method

Subjects

Four special education teachers from two school districts and four rehabilitation counselors from the Lane County area of Western Oregon participated in identifying 98 mildly retarded adolescents (ages 16-21) who were living with their families of origin. Fifty percent or 49 of these mother-adolescent pairs agreed to participate in the first phase of the study.

A home visit was scheduled with 49 mother-adolescent pairs to more fully explain the purpose, procedures, and potential benefits of the study. Two tests were administered to each mother-adolescent pair at that time. First, the Highlands Dependency Questionnaire (HDQ) (Berg, 1973) was orally administered to the mother in order to determine her perception of the degree to which her adolescent was independent/dependent. Second, two sub-tests from the Social and Prevocational Information Battery (SPIB) (Halpern, Raffeld, Irvin, & Link, 1975) were orally administered to the adolescent. The SPIB was used to equate a group of independent and a group of dependent adolescents in ability in order to

minimize attributing independent/dependent differences to differences in "real incapacity."

Twenty-eight adolescents (and their mothers) were selected from the home visited sample based on scores from the HDQ, and were invited to participate in the second phase of the study. Twenty-four subject-pairs accepted, constituting a group of HDQ measured independent adolescents (N = 12, mean score = 18, range = 8-21) and dependent adolescents (N = 12, mean score = 37, range = 29-44). The mean HDQ score for the originally tested 49 adolescents was 26 with a standard deviation of 7.

Subsequent to the selection of these two groups of adolescents, which was based solely on their HDQ scores, two additional definitions of independence and dependence were employed. The more rigorous definition required 100% agreement on the following five measures: HDQ score; the adolescent's rehabilitation counselor or teacher judgment based on a set of provided independent/dependent behavioral criteria; and the separate ratings of three clinicians. Three independent and three dependent adolescents met this 100% agreement definition. A more moderate definition required agreement on any combination of four out of the above five criteria. Seven independent and seven dependent adolescents fell into this moderately stringent definitional category. The results of this study are based on these three defined groups of independent/dependent adolescents.

Procedure

A problem-solving task was conducted separately with each of the selected 24 mother-adolescent pairs in a laboratory minature living room setting. They were informed of a microphone and the fact that they were

being videotaped through a one-way mirror. The task, which was planning a recreational outing of their own choosing, lasted 20 minutes. Adolescents and their mothers were instructed to engage in planning the activity together.

Measurement Instrument

The 24 videotapes were subjected to an interactional coding system designed to code 28 classifiable verbal and nonverbal behaviors. Primary emphasis of the MICS (Patterson, Note 1) is placed on the accurate coding of every behavior emitted that can be classified, with the responses being recorded sequentially in 30-second blocks. The MICS has been used extensively in previous research for coding the interaction between two adults in a problem-solving situation (Birchler, Weiss, & Vincent, 1975; Margolin & Weiss, 1978; Vincent, Weiss, & Birchler, 1975; Weiss, Hops, & Patterson, 1973). This research extended the use of the MICS coding system to the interaction between one adult (mother) and her adolescent retarded son or daughter.

Two previously trained coders in the use of the MICS system analyzed the 24 videotapes separately. Coder A coded 24 tapes. Coder B coded six tapes. Coders A and B separately coded the same six tapes. Intercoder reliability was 74%. Naturally, coders were not informed as to whether a particular tape included an independent or a dependent subject. The code sheets were then submitted to the MICS-II computer program (Wieder & Weiss, Note 2) which analyzed the interaction behavior unit frequencies, stimulus response relationship of the two or more parties interacting, and conditional probabilities.

Five clinical levels/domains have been derived from the 28 behavioral units in the MICS coding system and used in other studies (cited above). The domains, which are various combinations of the 28 behavioral units, are presented in Table 1. For the analysis of the data, these five levels/

Insert Table 1 about here

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domains were used as dependent measures for addressing the three research questions.

Results

Findings for Research Question One are reported in Table 2. This table presents the average frequencies of the behavioral levels/domains for each of the three defined groups of independent and dependent adolescents. A perusal of the table indicates that the most pronounced differences between independent and dependent adolescents occurred with the most rigorously defined group (Group A), even though the trends were in the same direction for the other two groups.

Insert Table 2 about here

Findings for Research Question Two are reported in Table 3. This table also presents the average frequencies of the behavioral levels/domains of the mothers of each of the three defined groups of independent and dependent adolescents. Again, a perusal of the table indicates that the most pronounced differences between mothers of independent and

dependent adolescents occurred with the most rigorously defined group (Group A), even though the trends were in the same direction for the other two groups.

Insert Table 3 about here

Findings for Research Question Three are reported in Figure 1. This figure presents the difference between the mean number of behaviors by levels/domains for independent adolescents and their mothers, in comparison with the difference between the mean number of behaviors by levels/domains for dependent adolescents and their mothers. Only the data for the most rigorously defined group are presented here.

Insert Figure 1 about here

Additional interactional analysis was provided on the stimulus-response patterns between independent and dependent adolescents and their mothers. Stimulus-response frequencies and conditional probability percentages were ascertained to determine the probability that mothers would respond with a certain level/domain of behavior given specified behavioral stimuli from their adolescents, or the probability that adolescents would respond with a certain level/domain of behavior given specified behavioral stimuli from their mothers.

Given the adolescents' stimuli on any of the five behavioral levels/domains, there were no response patterns which sufficiently differentiated mothers of independent and dependent adolescents. On the other hand, given

the mothers' stimuli on the behavioral levels/domains of problem solving (Level I), positive nonverbal (Level III), and negative verbal (Level IV), there were five response patterns which differentiated independent and dependent adolescents by at least 20% conditional probability. These five response patterns supported the mean frequency data presented in Table 1 and 2 and Figure 3.

Discussion

The results indicated that for each of the three research questions it was possible to differentiate behavioral patterns. In all cases, these differences were reflected in the rate of occurrance of behaviors rather than types of behavior, since the independent and dependent adolescents and their respective mothers were assessed on the same behavioral domains.

One pronounced behavioral characteristic of the independent versus dependent adolescents was that they participated more actively in the problem-solving task. In addition, they did virtually the same rate of problem-solving as did their mothers. One could interpret this balanced reciprocal exchange as indicating equality between one adult and one emerging adult. To the contrary, dependent adolescents did less problem solving than did their mothers in their interaction. In essence, they choose to be or were put in the position of being more passive while their mothers "took over" the problem-solving activity.

Another behavioral feature of the independent versus dependent adolescents was that they had a greater rate of both positive and negative

verbal behaviors. In addition, their rate of verbal behavior was greater than their mothers. To the contrary, the dependent adolescents rate of verbal behavior was less than their mothers. Assuming that there are no differences between the independent and dependent adolescents ability to engage in verbal activity, do the findings suggest that mentally retarded adolescents who are independent are more assertive and outgoing? If so, is it influenced, in part, by the fact that their mothers take less verbal control and give the opportunity for more active verbal participation to their adolescents?

An interpretation of the findings within a family systems model would suggest that certain transactional patterns between mothers and adolescents are repeated time after time. These transactional patterns become the accepted, actually preferred mother-adolescent interaction patterns. In fact, the interaction patterns reoccur so often that they are considered to be the "way of being" for the individuals involved. For example, mothers of dependent mildly retarded adolescents repeatedly take over the problem-solving while the mildly retarded adolescent assumes the more passive, non-assertive role.

When transactional patterns occur repeatedly, the members of the interaction assume roles, even become those roles. The analysis of the conditional probabilities may hint that the interaction pattern as measured by the behavioral domains used in this study, between retarded adolescents and their mothers, may be somewhat established by the late adolescent stage. In other words, regardless of the mother's stimuli, the independent adolescents

appeared to respond assertively, whereas, the dependent adolescents appeared to respond more passively. In other words, independent and dependent related behaviors may have reached by the adolescent developmental age some level of functional autonomy and thus gained customary useage.

It is the author's premise that dependence is, at least in part, related to family behavior patterns. Therefore, it seems reasonable to suggest that families can constructively foster greater self reliance in their mildly retarded adolescents. That is, since the family contributes to the dependence of its mentally retarded member, that same family should be able to encourage its mentally retarded member's independence.

One particularly productive approach to treating dependence in families of the retarded may be structural family counseling, which was developed by Dr. Salvador Minuchin and others at Philadelphia Child Guidance. The model of structural family theory makes the following assumptions: (1) certain types of family organization are closely related to the development and maintenance of problems of family members; and (2) family members' problems (e.g., overdependent adolescent) play a major role in maintaining family patterns (Minuchin et al., 1975). In regard to the second assumption, the role of maintaining family patterns becomes in and of itself an important source of reinforcement for the primary client's problems.

Traditionally, the presenting problem has been viewed as the client's problem, and only the client was treated. Within the system's approach of structural family counseling, it is assumed that the problem is maintained

within the family context. Therefore, the entire family is seen in counseling sessions (Minuchin, 1970; Minuchin et al., 1975). The change in focus from the problematic individual to the problematic family has implications regarding both the nature of the problem and for therapeutic intervention.

Of course, the qualities of independence and dependence are not restricted to family interactions. A person carries his preferred transactional behavior pattern into other settings and other relationships, e.g., classroom, work, counselor-client sessions, etc. In those settings, it is important for the teacher/work supervisor/counselor to be cognizant of the students/employees/clients preferred transactional behavior. Such awareness may minimize their participation in the person's dysfunctional transactional behaviors such as dependency.

Practitioners trying to remediate dependence may find working with an individual and his family more productive than working singly with an individual who then returns to the preferred transactional patterns within the family system. However, whether the practitioner is working with an individual alone or with the entire family, transactional patterns resulting in accepted or preferred roles which individuals have taken on as their identity can be expected to take considerable effort to change.

In summary, dependency can be said to be extremely debilitating to families of retarded persons and to retarded persons themselves. The present undertaking was to better understand the independence and dependence of mildly retarded adolescents as it exists in the family. By understanding the family transactional behavior, one can begin to better determine solutions to the problems of dependency.

Reference Notes

1. Patterson, G. R. Some procedures for assessing changes in marital interaction patterns. ORI Research Bulletin, 1976, 16(7), (Oregon Research Institute, Social Learning Center, 220 E. 11th, Eugene, Oregon 97401).
2. Wieder, G. B., & Weiss, R. L. Marital interaction coding system II: A user's guide. Clinical Psychology Program, Department of Psychology, University of Oregon, Eugene, 97403.

References

Andrews, R., & Brown, E. Firstborns, only children, sex, and three dependency measures. Perceptual and Motor Skills, 1974, 39(2), 773-774.

Baumrind, D. The development of instrumental competence through socialization. In A. D. Pick (Ed.), Minnesota symposia on child psychology: VII. Minneapolis: Minnesota Press, 1973, p. 214.

Belsky, M. B. The relationship of mother-child interaction to dependency behavior in first graders. Dissertation Abstracts International, 1973, 34(1-A), 165-166.

Berg, I., McGuire, R., & Whelan, E. The Highlands Dependency Questionnaire (H.D.Q.). An administered version for use with mothers of school children. Journal of Child Psychology and Psychiatry, 1973, 14, 107-121.

Birchler, H. R., Weiss, R. L., & Vincent, J. P. Multi-method analysis of social reinforcement exchange between mentally distressed and nondistressed spouse and stranger dyads. Journal of Personality and Social Psychology, 1975, 31(2), 349-360.

Cornoldi, C., & Fattori, L. Age spacing in firstborns and symbiotic dependence. Journal of Personality & Social Psychology, 1976, 33(4), 431-434.

Donoghue, C. D. Interrelatedness of parent characteristics and independence and dependence in children. Dissertation Abstracts International, 1975, 35(8-B), 4167.

Halpern, A., Raffeld, P., Irvin, L., & Link, R. Social and prevocational information battery. Monterey, Cal.: CTB/McGraw-Hill, 1965.

Hollinger, C. L. The effects of student dependency, sex, birth order, and teacher control ideology on teacher-student interaction. Dissertation Abstracts International, 1976, 37(2-A), 883.

Kinsolving, D. L., & Bone, R. N. Firstborns, only children, sex and field independence. Psychological Reports, 1971, 29(9), 126.

Loeb, R. C. Concomitants of boys' locus of control examined in parent-child interactions. Developmental Psychology, 1975, 11(3), 353-358.

Marcus, R. F. The effects of children's emotional and instrumental dependent behavior on parental response. Journal of Psychology, 1976, 92(1), 57-63.

Margolin, G., & Weiss, R. L. Comparative evaluation of therapeutic components associated with behavioral marital treatments. Journal of Consulting and Clinical Psychology, 1978, 46(6), 1476-1486.

Mcdonagh, J. M. The relationship between familial characteristics and two measures of dependency. Dissertation Abstracts International, 1971, 32(1-B), 542.

Minuchin, S. The use of an ecological framework in the treatment of a child. In E. J. Anthony & C. Koupernik (Eds.), The child in his family. New York: Wiley, 1970, pp. 41-57.

Minuchin, S., Baker, L., Rosman, B. L., Liebman, R., Milman, L., & Todd, T. C. A conceptual model of psychosomatic illness in children: Family organization and family therapy. Archives of General Psychiatry, 1975, 32, 1031-1038.

Osofsky, J. D., & O'Connell, E. J. Parent-child interaction: Daughters' effects upon mothers' and fathers' behaviors. Developmental Psychology, 1972, 7(2), 157-168.

Osofsky, J. D., & Oldfield, S. Children's effects upon parental behavior: Mothers' and fathers' responses to dependent and independent child behaviors. Proceedings of the Annual Convention of the American Psychological Association, 1971, 6(1), 143-144.

Stanfield, J. S. Graduation: What happens to the retarded child when he grows up? Exceptional Children, 1973, 39(7), 548-552.

Stewart, R. H. Birth order and dependency. Journal of Personality and Social Psychology, 1967, 6(2), 192-194.

Taylor, G. R. Father control and young children's independent or dependent behavior. Dissertation Abstracts International, 1976, 37(3-A), 1393.

Vincent, J. P., Weiss, R. L., & Birchler, G. R. A behavioral analysis of problem solving in distress and nondistressed married and stranger dyads. Behavior Therapy, 1975, 6, 475-487.

Weiss, R. L., Hops, H., & Patterson, G. R. A framework for conceptualizing marital conflict: A technology for altering it, some data for evaluating it. In L. A. Hamerlynck, L. C. Handy, & E. J. Mach (Eds.), Behavior change: Methodology, concepts and practice. Champaign: Record Press, 1973, pp. 309-342.

Footnote

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Table 1

Five Behavioral Domains for Comparison

Level	Domain	Combined Behavioral Variables
I	Problem Solving	Responsibility, compromise, positive solution
II	Positive Verbal	Agree, approve, humor
III	Positive Nonverbal	Assent, attention, smile/laugh, positive physical contact
IV	Negative Verbal	Complain, criticize, disagree, deny responsibility, excuse, put down
V	Negative Nonverbal	No response, not tracking, turn off

Table 2

A Mean Frequency Comparison Between Independent and Dependent Adolescents on Each of the Five Behavioral Levels/Domains

Levels/Domains	Independents			Dependents		
	Definitional Groups*			Definitional Groups*		
	A	B	C	A	B	C
I Problem Solving	37	29	26	12	20	23
II Positive Verbal	10	6	7	1	4	3
III Positive Nonverbal	63	66	66	75	75	63
IV Negative Verbal	38	17	14	18	14	18
V Negative Nonverbal	19	21	30	52	43	36

*Group A: Most rigorous definition (met 5 out of 5 criteria)
Group B: Moderately rigorous definition (met 4 out of 5 criteria)
Group C: Least rigorous definition (HDQ only)

Table 3

A Mean Frequency Comparison Between Mothers of Independent and Dependent Adolescents on Each of the Five Behavioral Levels/Domains

Levels/Domains	Independents			Dependents		
	Definitional Groups*			Definitional Groups*		
	A	B	C	A	B	C
I Problem Solving	43	41	44	53	54	50
II Positive Verbal	4	5	6	3	5	3
III Positive Nonverbal	91	74	68	52	57	62
IV Negative Verbal	15	8	7	12	9	12
V Negative Nonverbal	15	12	15	11	13	15

*Group A: Most rigorous definition (met 5 out of 5 criteria)
Group B: Moderately rigorous definition (met 4 out of 5 criteria)
Group C: Least rigorous definition (HDQ only)

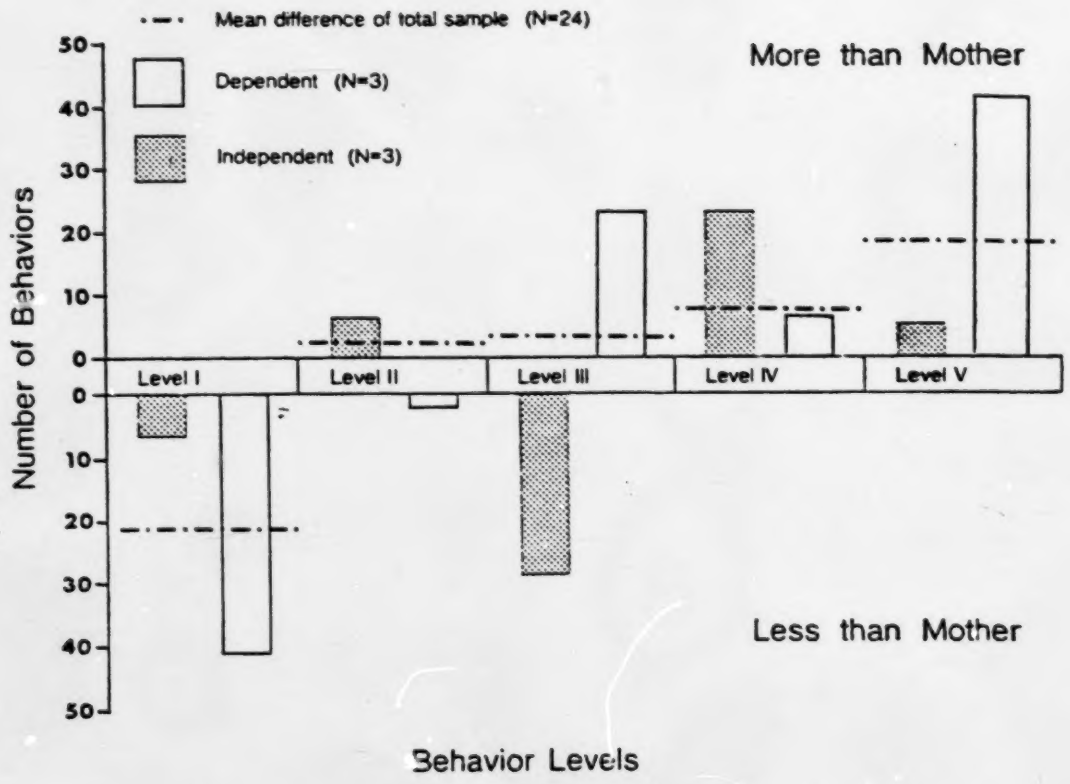

Figure 1

A Comparison Between Independent Adolescents and Their Mothers and Dependent Adolescents and Their Mothers on Each of the Five Behavioral Levels (Most Rigorously Defined Groups)